What is claimed is:

1. A method of improving downlink packet switching for use in a mobile telecommunications network having a plurality of base stations capable of communicating in corresponding uplink and downlink with a plurality of mobile terminals operating a frequency division duplex (FDD) mode, wherein a downlink shared channel (DSCH) is used to carry user data to the mobile terminals, and wherein the mobile terminals are capable of operating in a forward access channel (cell_FACH) state and a dedicated channel (cell_DCH) state and wherein the mobile terminals are also capable of state-switching between the cell_FACH state and the cell_DCH state for setting up an associated dedicated channel (aDCH) for carrying physical control information between the mobile terminals and the base stations in DSCH scheduling for downlink packet switching, said method comprising the steps of:

selecting, by a communicating base station, a mobile terminal among said plurality of mobile terminals for transmission of a defined down link shared channel (DSCH); and

providing a message in a forward access channel (FACH) to the selected mobile mobile indicative of an operation mode using a further transportation channel different from the aDCH for carrying the physical control information between the selected mobile terminal and said communicating base station for avoiding the state-switching during the downlink packet switching.

2. The method of claim 1, wherein the further transportation channel comprises a common packet channel (CPCH) specified for said operation mode.

3. The method of claim 2, wherein the specified common packet channel (CPCH) is used as a reverse link transport of the defined physical downlink shared channel (DSCH).

4. The method of claim 2, wherein the message indicative of said operation mode comprises a physical transport format (TFCI) of the DSCH and the message is carried in a downlink dedicated physical control channel (DPCCH) for the specified common packet channel (CPCH).

5. The method of claim 2, wherein the specified common packet channel (CPCH) in the uplink is announced to the mobile terminals in a system information block (SIB).

6. The method of claim 5, wherein the uplink common packet channel (CPCH) is announced to the mobile terminals as an information element presented in the radio resource control (RRC) message.

7. The method of claim 4, wherein the downlink dedicated physical control channel for the specified common packet channel (DL-DPCCH) is announced to the mobile terminals for announcing the common packet channel (CPCH) to the mobile terminals.

8. The method of claim 4, wherein the downlink dedicated physical control channel (DPCCH) for the common packet channel (CPCH) which is used as the reverse link transport of the DSCH is provided as a code in a node of a downlink code-tree.

9. The method of claim 1, wherein said message comprises a scheduling message provided to the selected mobile terminal when the selected mobile terminal is in the cell_FACH state.

10. The method of claim 1, wherein the selected mobile terminal is identified in the FACH message.

11. The method of claim 8, further comprising the step of decoding the code in the downlink code tree by the selected mobile terminal.

12. The method of claim 8, wherein the code is an orthogonal code for preventing the CPCH code reserved for pDSCH uplink traffic of the selected mobile terminal being acquired by a further mobile terminal different from the selected mobile terminal.

13. The method of claim 3, wherein the specified common packet channel (CPCH) is scheduled as a reverse link transport of the specified DSCH in a scheduling period in the uplink, wherein said scheduling period is equal to a scheduling period for the DSCH in the downlink with a fixed frame offset.

14. The method of claim 4, further comprising the step of defining coordination of frame time reference, allocation and scheduling of the specified packet channels CPCH, DL-DPCCH and DSCH.

15. The method of claim 7, wherein the message in the forward access channel (FACH) indicative of said operation mode is provided when a traffic load associated with the cell_FACH state is in a temporal peak-load condition for reducing said traffic load.

16. The method of claim 15, wherein said traffic load is reduced by switching protocol data units from the FACH to the defined DSCH.

17. The method of claim 7, wherein the message in the forward access channel (FACH) indicative of said operation mode is provided when a traffic load associated with the cell_FACH state is smaller than a predetermined value and said traffic load is directed to the defined DSCH.

18. A mobile telecommunications network having a plurality of base stations capable of communicating in corresponding uplink and downlink with a plurality of mobile terminals operating a frequency division duplex (FDD) mode, wherein a downlink shared channel (DSCH) is used to carry user data to the mobile terminals, and wherein the mobile terminals are capable of operating in a forward access channel (cell_FACH) state and a dedicated channel (cell_DCH) state and wherein the mobile terminals are also capable of state-switching between the cell_FACH state and the cell_DCH state for setting up an associated dedicated channel (aDCH) for carrying physical control information between the mobile terminals and the base stations in DSCH scheduling for downlink packet switching, said network comprising:

means, located in a communicating base station, for selecting a mobile terminal among said plurality of mobile terminals for transmission of a defined down link shared channel (DSCH); and

means for providing a message in a forward access channel (FACH) to the selected mobile mobile indicative of an operation mode using a further transportation channel different from the aDCH for carrying the physical control information between the selected mobile terminal and said communicating base station for avoiding the state-switching during the downlink packet switching.

19. The network of claim 18, wherein the further transportation channel comprises a common packet channel (CPCH) specified for said operation mode.

20. The network of claim 19, wherein the specified common packet channel (CPCH) is used as a reverse link transport of the defined physical downlink shared channel (DSCH).

21. The network of claim 19, wherein the message indicative of said operation mode comprises a physical transport format (TFCI) of the DSCH and the message is carried in a downlink dedicated physical control channel (DPCCH) for the specified common packet channel (CPCH).

22. The network of claim 19, wherein the specified common packet channel (CPCH) in the uplink is announced to the mobile terminals in a system information block (SIB).

23. The network of claim 22, wherein the uplink common packet channel (CPCH) is announced to the mobile terminals as an information element presented in the radio resource control (RRC) message.

24. The network of claim 21, wherein the downlink dedicated physical control channel for the specified common packet channel (DL-DPCCH) is announced to the mobile terminals for announcing the common packet channel (CPCH) to the mobile terminals.

25. The network of claim 21, wherein the downlink dedicated physical control channel (DPCCH) for the common packet channel (CPCH) which is used as the reverse link transport of the DSCH is provided as a code in a node of a downlink code-tree.

26. The network of claim 18, wherein said message comprises a scheduling message provided to the selected mobile terminal when the selected mobile terminal is in the cell_FACH state.

27. The network of claim 18, wherein the selected mobile terminal is identified in the FACH message.

28. The network of claim 25, further comprising means, located in the selected mobile terminal, for decoding the code in the downlink code tree.

29. The network of claim 25, wherein the code is an orthogonal code for preventing the CPCH code reserved for pDSCH uplink traffic of the selected mobile terminal being acquired by a further mobile terminal different from the selected mobile terminal.

30. The network of claim 21, wherein the specified common packet channel (CPCH) is scheduled as a reverse link transport of the specified DSCH in a scheduling period in the uplink, wherein said scheduling period is equal to a scheduling period for the DSCH in the downlink with a fixed frame offset.

31. The network of claim 21, further comprising means of defining coordination of frame time reference, allocation and scheduling of the specified packet channels CPCH, DL-DPCCH and DSCH.

32. The network of claim 24, wherein the message in the forward access channel (FACH) indicative of said operation mode is provided when a traffic load associated with the cell_FACH state is in a temporal peak-load condition for reducing said traffic load.

33. The network of claim 32, wherein said traffic load is reduced by switching protocol data units from the FACH to the defined DSCH.

34. The network of claim 24, wherein the message in the forward access channel (FACH) indicative of said operation mode is provided when a traffic load associated with the cell_FACH state is smaller than a predetermined value and said traffic load is directed to the defined DSCH.

35. A mobile apparatus for use in a mobile telecommunications network having a plurality of base stations capable of communicating in corresponding uplink and downlink with said mobile apparatus and a plurality of further mobile apparatus operating a frequency division duplex (FDD) mode, wherein a downlink shared channel (DSCH) is used to carry user data to said mobile apparatus, and wherein said mobile apparatus is capable of operating in a forward access channel (cell_FACH) state and a dedicated channel (cell_DCH) state, and said mobile apparatus is also capable of state-

switching between the cell_FACH state and the cell_DCH state for setting up an associated dedicated channel (aDCH) for carrying physical control information between said mobile apparatus and the base stations in DSCH scheduling for downlink packet switching, said mobile apparatus comprising means for receiving a message conveyed in a forward access channel (FACH) indicative of an operation mode using a further transportation channel different from the aDCH for carrying the physical control information between the said mobile apparatus and a communicating base station for avoiding the state-switching during the downlink packet switching, when said mobile apparatus is selected by the communicating base station for transmission of a defined down link shared channel (DSCH).

36. The mobile apparatus of claim 35, wherein the further transportation channel comprises a common packet channel (CPCH) specified for said operation mode for use as a reverse link transport of the defined physical downlink shared channel (DSCH), wherein the specified CPCH is announced in a system information block (SIB) as an information element presented in the radio resource control (RRC) message.

37. The mobile apparatus of claim 36, wherein the message indicative of said operation mode comprises a physical transport format (TFCI) of the DSCH and the message is carried in a downlink dedicated physical control channel (DPCCH) for the specified common packet channel (CPCH).

38. The mobile apparatus of claim 37, wherein the downlink dedicated physical control channel for the specified common packet channel (DL-DPCCH) is indicative of the specified common packet channel (CPCH), and wherein said DL-DPCCH is provided to said mobile apparatus as a code in a node of a downlink code-tree, said mobile apparatus further comprising means for decoding the code for identifying the specified CPCH.

39. The mobile apparatus of claim 35, wherein said message comprises a scheduling message provided to the selected mobile terminal when said mobile apparatus is in the cell_FACH state.

40. The mobile apparatus of claim 38, wherein the code is an orthogonal code for preventing the CPCH code reserved for pDSCH uplink traffic of the selected mobile terminal being acquired by one of the further mobile apparatus.

41. A network apparatus to be used in a mobile telecommunications network having a plurality of base stations capable of communicating in corresponding uplink and downlink with a plurality of mobile terminals operating a frequency division duplex (FDD) mode, wherein a downlink shared channel (DSCH) is used to carry user data to the mobile terminals, and wherein the mobile terminals are capable of operating in a forward access channel (cell_FACH) state and a dedicated channel (cell_DCH) state and wherein the mobile terminals are also capable of state-switching between the cell_FACH state and the cell_DCH state for setting up an associated dedicated channel (aDCH) for carrying physical control information between the mobile terminals and the base stations in DSCH scheduling for downlink packet switching, said network apparatus comprising:

means for selecting a mobile terminal among said plurality of mobile terminals for transmission of a defined down link shared channel (DSCH); and

means for providing a message in a forward access channel (FACH) to the selected mobile mobile indicative of an operation mode using a specified common packet channel (CPCH) for carrying the physical control information between the selected mobile terminal and a communicating base station for avoiding the state-switching during the downlink packet switching.

42. The network apparatus of claim 41, wherein the specified common packet channel (CPCH) is used as a reverse link transport of the defined physical downlink shared channel (DSCH).

43. The network apparatus of claim 41, wherein the specified common packet channel (CPCH) in the uplink is announced to the mobile terminals in a system information block (SIB) as an information element present in the radio resource control (RRC) message.

44. The network apparatus of claim 41, wherein the message indicative of said operation mode comprises a physical transport format (TFCI) of the DSCH and the

message is carried in a downlink dedicated physical control channel (DL-DPCCH) for the specified common packet channel (CPCH).

45. The network apparatus of claim 44, wherein the DL-DPCCH for the specified CPCH is announced to the mobile terminals for announcing the specified CPCH to the mobile terminals.

46. The network apparatus of claim 44, wherein the DL-DPCCH for the specified is provided as a code in a node of a downlink code-tree.

47. The network apparatus of claim 41, wherein said message comprises a scheduling message provided to the selected mobile terminal when the selected mobile terminal is in the cell_FACH state.

48. The network apparatus of claim 41, wherein the selected mobile terminal is identified in the FACH message.

49. The network apparatus of claim 46, wherein the code is an orthogonal code for preventing the CPCH code reserved for pDSCH uplink traffic of the selected mobile terminal being acquired by a further mobile terminal different from the selected mobile terminal.

50. The network apparatus of claim 44, wherein the specified common packet channel (CPCH) is scheduled as a reverse link transport of the specified DSCH in a scheduling period in the uplink, wherein said scheduling period is equal to a scheduling period for the DSCH in the downlink with a fixed frame offset.

51. The network apparatus of claim 44, further comprising means of defining coordination of frame time reference, allocation and scheduling of the specified packet channels CPCH, DL-DPCCH and DSCH.

52. The network apparatus of claim 47, further comprising means for monitoring traffic for providing the message in the forward access channel (FACH) indicative of said operation mode when a traffic load associated with the cell _FACH is in a temporal peak-load condition for reducing said traffic load.

53. The network apparatus of claim 52, wherein said traffic load is reduced by switching protocol data units from the FACH to the defined DSCH.

55. The network apparatus of claim 47, further comprising means for monitoring traffic for providing the message in the forward access channel (FACH) indicative of said operation mode when a traffic load associated with the cell_FACH state is smaller than a predetermined value.